

**Notice of Allowability**

Application No.

09/809,169

Examiner

Russell Frejd

Applicant(s)

ONODERA ET AL.

Art Unit

2128

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment received on 17 March 2006.
2. ☒ The allowed claim(s) is/are 7-10.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some\* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |                                                                                                                     |                                                                                       |
|---------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)                                                    | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)           |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                   |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance  |
|                                                                                                                     | 9. <input type="checkbox"/> Other _____                                               |

  
**RUSSELL FREJD**  
**PRIMARY EXAMINER**

In re Application of: Onodera et al.

***Allowance of Application # 09/809,169***

1. The following communication is in response to applicant's amendment received 17-March-2006. Claims 1-6 were canceled by this amendment. Claims 7-10 remain in the case.

***Examiner's Amendment***

2. An Examiner's Amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 C.F.R. 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the Issue Fee. Authorization for this Examiner's Amendment was given by Carl Brundidge (Reg. No. 29,621) on 8-May-2006.

**2.1 In the Specification:**

Page 3 line 10 Delete "besides".

**2.2 In the Claims:**

Claim 7 line 16 Delete "and".

line 18 Delete "." and add --corresponding to said laminate structure;  
means for performing numerical analysis on said analytic model; and  
displaying said laminate structure.--.

Claim 8 line 2 Change "the joint means, joint model type" to --said joint means, the joint model type--.

In re Application of: Onodera et al.

### ***Reasons for Allowance***

3. The following is an Examiner's Statement of Reasons for the indication of allowable subject matter. The instant application is directed to a non-obvious improvement over the information described in the related prior art, specifically the article authored by Wang et al., entitled *The Design and Fabrication of Welded Tubular Joints Using Solid Modeling Techniques*, which describes a method for the design and manufacture of tubular joints for welded structures using solid modeling techniques interfaced with a numerically controlled machine tool and a robot simulator.

The improvement of the present invention comprises an analytic model preparing apparatus for automatically preparing an analytic model for numerical analysis in respect of a CAD model including a joint means, wherein the apparatus has the function of automatically searching a part of laminate structure from the CAD model data, synthesizing a joint model and a neutral plane model to prepare an analytic model corresponding to the laminate structure, performing numerical analysis on the analytic model, and displaying the laminate structure. This patentable distinction is included in independent claim no. 7.

The art of record, either individually or in combination, fails to teach, suggest, or render obvious the useful, concrete and tangible < automatic preparation and numerical analysis of an analytic model corresponding to a laminate structure > having the corresponding structure which is disclosed in the specification and equivalents thereof at least at page 7, line 5 through page 25, line 28, and Figures 1-12. In view of the foregoing, the claims of the present application are found to be patentable over the prior art.

In re Application of: Onodera et al.

***Response Guidelines***

4. Any comments considered necessary by applicant **MUST** be submitted no later than the payment of the Issue Fee and, to avoid processing delays, should preferably accompany the Issue Fee. Such submissions should clearly be labeled "Comments on Statement of Reasons for Allowance".

**4.1 Any response to the Examiner in regard to this allowance should be**

**directed to:** Russell Frejd, telephone number (571) 272-3779, Monday-Friday from 0530 to 1400 ET, or the examiner's supervisor, Kamini Shah, telephone number (571) 272-2279. Inquires of a general nature or relating to the status of this application should be directed to the TC2100 Group Receptionist (571) 272-2100.

**mailed to:** Commissioner of Patents and Trademarks  
P.O. Box 1450, Alexandria, VA 22313-1450

**or faxed to:** (571) 273-8300

*Hand-delivered responses should be brought to the Customer Service Window, Randolph Building, 401 Dulany Street, Alexandria, VA, 22314.*

**Date:** 15-May-2006



**RUSSELL FREJD  
PRIMARY EXAMINER**